

10/520435  
Rec'd PCTO 05 JAN 2004

(12) NACH DEM VERTRAG ÜBER DIE INTERNATIONALE ZUSAMMENARBEIT AUF DEM GEBIET DES  
PATENTWESENS (PCT) VERÖFFENTLICHTE INTERNATIONALE ANMELDUNG

(19) Weltorganisation für geistiges Eigentum  
Internationales Büro



(43) Internationales Veröffentlichungsdatum  
11. März 2004 (11.03.2004)

PCT

(10) Internationale Veröffentlichungsnummer  
**WO 2004/020072 A1**

(51) Internationale Patentklassifikation<sup>7</sup>: B01D 29/56,  
46/24

(72) Erfinder; und  
(75) Erfinder/Anmelder (nur für US): DIEL, Bernhard  
[DE/DE]; Sohnreystrasse 8, 37124 Rosdorf (DE).

(21) Internationales Aktenzeichen: PCT/EP2003/006563

(81) Bestimmungsstaaten (national): CN, US.

(22) Internationales Anmeldedatum:  
21. Juni 2003 (21.06.2003)

(84) Bestimmungsstaaten (regional): europäisches Patent (AT,  
BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,  
HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

(25) Einreichungssprache: Deutsch

Veröffentlicht:

(26) Veröffentlichungssprache: Deutsch

— mit internationalem Recherchenbericht

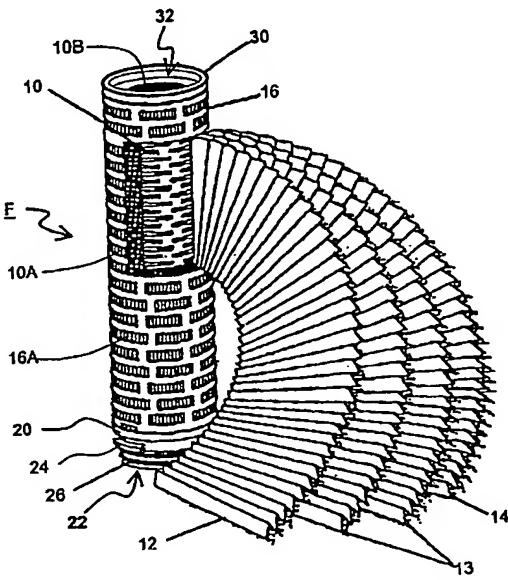
(30) Angaben zur Priorität:  
102 39 241.2 27. August 2002 (27.08.2002) DE

Zur Erklärung der Zweiibuchstaben-Codes und der anderen Abkürzungen wird auf die Erklärungen ("Guidance Notes on Codes and Abbreviations") am Anfang jeder regulären Ausgabe der PCT-Gazette verwiesen.

(71) Anmelder (für alle Bestimmungsstaaten mit Ausnahme von  
US): SARTORIUS AG [DE/DE]; Weender Landstrasse  
94-108, 37075 Göttingen (DE).

(54) Title: FILTER ELEMENT, PARTICULARLY FOR THE STATIC OR DEAD-END FILTRATION OF FLUIDS, AND COR-  
RESPONDING FILTER DEVICE

(54) Bezeichnung: FILTERELEMENT, INSbesondere ZUR STATISCHEN BZW. DEAD-END-FILTRATION VON FLUI-  
DEN, SOWIE FILTERVORRICHTUNG



(57) Abstract: The invention relates to a filter element (F), particularly for the static or dead-end filtration of fluids, comprising an inner, essentially hollow supporting core (10) and at least one filter layer (12-14) placed thereon. The inner supporting core (10) is formed as a single piece together with a first end plate (20) and with a second end plate (30). The first end plate (20) comprises a connecting piece (22), which is provided therewith as a single piece and which is fluid-connected to the supporting core (10). The second end plate (30) has a seat (32), which is formed therein, is fluid-connected to the supporting core (10) and is adapted to the shape of the connecting piece (22) whereby enabling a connecting piece (22) of a second structurally identical filter element (F) to be at least partially inserted into the seat (32) in order to establish a fluid connection between the supporting cores (10) of the filter elements (F). The invention also relates to a filter device for fluids comprising a housing, which has an inlet for the fluid to be filtered and an outlet for the filtrate, and comprising two or more inventive filter elements (F) that are interconnected via the respective connecting piece (22) and the respective seat (32). The outlet is fluid-connected to a housing-side seat into which the connecting piece (22) of one of the at least two filter elements (F) can be at least partially inserted in order to establish a fluid connection between the outlet and the supporting cores (10) of the two or more filter elements (F).

[Fortsetzung auf der nächsten Seite]

WO 2004/020072 A1

BEST AVAILABLE COPY